## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

## Listing of claims:

1. (currently amended) A golf ball comprising a core, and a thermoset polyurethane cover covering the core, wherein:

the polyurethane cover is formed by curing a urethane prepolymer having an isocyanate group at a terminal thereof with a curing agent;

the urethane prepolymer contains a polycarbonate polyol component having a number-average molecular weight of from 300 to 3000; and

the polycarbonate polyol is poly(hexamethylene carbonate) or poly(1,4 cyclohexamethylene carbonate).

## 2. (canceled).

3. (previously presented) The golf ball according to claim 1, wherein:

the urethane prepolymer has a free NCO group content of from 5% to 15% by mass; and

the curing agent is a diol or a diamine each having a numberaverage molecular weight of from 50 to 500 and is used in an amount such that the equivalent ratio of the amino or hydroxyl group of the curing agent to the free NCO group of the urethane prepolymer (OH/NCO or  $NH_2/NCO$ ) is from 0.8 to 1.2.

4. (original) The golf ball according to claim 1, wherein the polyurethane cover has a Shore D hardness of from 40 to 63 at a non-dimpled portion thereof.

## 5-6. (canceled).

- 7. (previously presented) The golf ball according to claim 1, wherein the core is solid core.
- 8. (previously presented) The golf ball according to claim 7, wherein: the urethane prepolymer has a free NCO group content of from 5% to 15% by mass; and

the curing agent is a diol or a diamine each having a number-average molecular weight of from 50 to 500 and is used in an amount such that the equivalent ratio of the amino or hydroxyl group of the curing agent to the free NCO group of the urethane prepolymer (OH/NCO or NH2/NCO) is from 0.8 to 1.2.

9. (previously presented) The golf ball according to claim7, wherein the polyurethanecover has a Shore D hardness of from40 to 63 at a non-dimpled portion thereof.